REMARKS

In the Final Office Action, the Examiner noted that claims 1, 3-10, 12-21 and 23-28 are pending in the application and that claims 1, 3-6, 9-10, 12-18, 21 and 23-28 stand rejected. The Examiner further noted that claims 7, 8 and 19-20 are objected to. All claims are unamended by this response.

In view of the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102. Furthermore, the Applicants submit that all of these claims now satisfy the requirements of 35 U.S.C. §112. Thus the Applicant believes that all of these claims are now in allowable form.

Rejections

A.   35 U.S.C. § 112

The Examiner rejected the Applicant's claims 9 and 21 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Examiner alleges that it is not clear how an area on a disk could be verified for errors when the area is being skipped.

The Applicant's claim 9 specifically recites:

"The method according to claim 5, wherein said selectively reading step further comprises the step of skipping over at least part of the accessed portion."

In support of at least claim 9, the Applicant in the Specification specifically recites:

"Once a segment of data has been accessed, all or a portion of that segment can then be examined to determine whether the portion of the recordable storage medium from which the segment was accessed contains a defect, as shown at step 214. In one arrangement, it can be determined whether the portion f the recordable storage medium has one or more defects by reading all or a portion of the segment of data and then selectively processing one or more error correction indicators in the segment to locate one or more errors in the segment. As an example, multimedia data read from a DVD disc can contain one or more error correction flags, which can be processed to locate errors in the data. For

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instance, these error correction flags can be inner parity errors, outer parity errors or a combination thereof located within the Reed-Solomon section." (See Specification, page 12, lines 6-16).

As evident from at least the portion of the Applicant's disclosure presented above, in the invention of the Applicant it is not necessary to examine all of the data in an accessed portion of a recordable storage medium wherein new data is to be recorded to determine if and where defects exist in the accessed portion. That is, as taught by the Applicant's and claimed by at least the Applicant's claims 9 and 21, in embodiments of the Applicant's invention, only a portion of the accessed segment needs to be examined to determine if and where defects exist, the examined portion in various embodiments containing error correction indicators. As such at least part of the accessed portion can be skipped as claimed by at least the Applicant's claims 9 and 21.

For at least the reasons recited above, the Applicant respectfully submits that claims 9 and 21 absolutely particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Therefore, the Applicant submit that claims 9 and 21, as they now stand, fully satisfy the requirements of 35 U.S.C. § 112 and are patentable thereunder.

B.   35 U.S.C. § 102

The Examiner rejected the Applicant's claims 1, 3-6, 10, 12-18 and 23-28 under 35 U.S.C. § 102(b) as being anticipated by Ohara et al. (U.S. Patent 6,317,831, hereinafter "Ohara"). The rejection is respectfully traversed.

The Examiner alleges that Ohara anticipates the Applicant's invention. More specifically, the Examiner alleges that the Applicant's independent claims 1 and 12 merely read on the data verification step of Ohara, wherein previously or old data on a disk is read to determine if an error is present and if so, a correction step is taken. The Applicant respectfully disagrees.

The Applicant respectfully submits that the Ohara reference fails to teach, suggest or disclose each and every element of at least the Applicant's invention as recited in at least the Applicant's independent claim 1, which specifically recites:

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"A method of detecting defects in a recordable optical storage medium, comprising the steps of:
accessing a portion of the recordable storage medium wherein new data is to be recorded; and
selectively examining data in said accessed portion for defects **prior to recording said new data**;
wherein if defects are detected in the data in said accessed portion, corrective measures are taken **such that the new data to be recorded is not recorded in said accessed portion having defects.**" (emphasis added).

The Applicant's invention is directed at least in part to a method and system for detecting defects in a recordable optical storage medium where at least a portion of the recordable storage medium in which new data is to be recorded is examined for defects. In one embodiment of the invention of the Applicant as claimed by at least claim 1, if previously recorded data exists in the accessed portion, the old data is reproduced and examined for defects **prior to recording the new data**. In the invention of the Applicant, if the examined old data in the accessed portion of the storage medium exhibits defects, corrective measures are taken **such that the new data to be recorded is not recorded in said accessed portion having defects.**

More specifically, the invention of the Applicant is directed at least in part to addressing the deficiencies of the prior art wherein lengthy programs are recorded only to subsequently discover that a portion of the program was recorded onto a damaged or worn area of a storage medium. (See Specification, page 2, line 22 through page 3, line 1.) As such, the Applicant's invention is directed at least in part to methods of detecting defects in storage media **prior to recording new data** as claimed by at least the Applicant's claim 1.

In support of the Applicant's invention, at least as claimed by the Applicant's claim 1 recited above, the Applicant in the Specification, specifically recites:

"Specifically, a segment of multimedia data that has been recorded onto a first portion of a recordable storage medium can be accessed, and the data can then be selectively examined to determine whether the first portion contains a defect. The data that is examined can be data that has just been recorded during a current recording session **or data that has been previously recorded and is being played back. If a defect is detected, then a number of corrective measures can be taken including: generating a defect message; storing the address of the**

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> **first portion of the recordable storage medium in a table; writing the segment of data onto a second portion of the recordable storage medium; and modifying the selectively examining step."** (See Applicant's Specification, page 11, lines 4-13).

And

> "In another arrangement, test data can be written onto at least a portion of the recordable storage medium **prior to or during the step of writing the actual data to be recorded onto that portion of the medium.** Specifically, a portion of the recordable storage medium can received the test data. Once the test data is recorded onto the medium, the test data can then be selectively examined - similar to the examining process described above in step 214 - to determine whether the recording area contains one or more flaws." (See Applicant's Specification, page 16, lines 17-23).

The Applicant, in the Specification, further recites:

> "If a defect is detected, then a defect message can be generated and/or the address of the portion of the recordable storage medium which contains the defect can be stored in a table for future reference, as discussed in step 222 of flowchart 200. Thus, a user can be made aware of the suitability of a storage medium's recording capability **prior to the actual recording.**" (See Applicant's Specification, page 17, lines 12-16).

And

> "Specifically, **before a segment of actual data is written to a portion of the medium,** test data can be written to that portion of the medium and searched for errors. If the portion of the medium contains no defects, then the actual data can be recorded onto that portion of the medium and the process can continue.
> If a defect is discovered, then one or more of the previously discussed corrective measures of step 222 of flowchart 200 can be performed. For example, a defect message can be generated and/or the address of the portion of the recordable storage medium which contains the defect can be stored in a table for future reference. Moreover, the test data can be recorded onto another area of the medium, and the test data can also be examined again to ensure that the new medium area receiving the test data contains no defects. **Once a suitable area has been located, the actual data can be recorded there**, and the process of alternately writing test and actual data can continue." (See Applicant's Specification, page 17, line 21 through page 18, line 9).

In support of at least the Applicant's claim 1, the Applicant specifically teaches, as clearly depicted by at least the portions of the Applicant's Specification depicted above, a method and system for detecting defects in a recordable optical storage medium including playing back multimedia data that has been recorded during a previous recording session to determine whether an accessed portion of the

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storage medium contains a defect prior to recording actual data. In an alternate embodiment of the invention, the Applicant specifically teaches that in one arrangement the test data is written to the medium prior to the recording of the actual data and that alternatively, the test data can be written to the medium and tested for defects during a recording session of the actual data but still prior to writing the actual data to a portion of the medium. That is, in at least the claimed invention of the Applicant at least with respect to claim 1, a portion of a medium wherein it is desired to write actual data is always tested prior to writing the actual data, **such that actual data to be recorded is not recorded in a portion of the medium having defects.** In the invention of the Applicant, the testing of the media for defects before actually attempting to record actual, desired content supports real time recording and recovery in a manner superior to that of Ohara. That is, the invention of the Applicant overcomes deficiencies in the prior art, such as Ohara, where actual data is recorded onto a storage medium, only to subsequent to the recording, discovering that at least a portion of the actual data was recorded onto a damaged or worn portion of the storage medium. That is, the Applicant's invention is directed at least in part to preventing the unnecessary rerecording of actual data due to undetected defects in a storage medium.

The Applicant respectfully submits that there is absolutely no teaching, suggestion or disclosure in Ohara for a method and system for detecting defects in a recordable optical storage medium including at least "selectively examining data in said accessed portion for defects **prior to recording said new data**" "wherein if defects are detected in the data in said accessed portion, corrective measures are taken **such that the new data to be recorded is not recorded in said accessed portion having defects**" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1 and claim 12.

Ohara teaches an information recording/reproducing apparatus and a method of recording data onto an information recording/reproducing media. In Ohara, the information recording/reproducing apparatus has the capability of handling the information recording/reproducing media both when they are not in a case and when they are in a case. A recording mode is selected basing on the determinations of (i) whether or not the recording/reproducing medium is a medium

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type which is necessarily contained in a case at recording and (ii) whether the case is present or absent. (See Ohara, Abstract).

In contrast to the invention of the Applicant, in Ohara, upon a history determining means detecting the absence of an identification member, a user is offered an option whether or not to perform a verification mode. If a user opts to perform the verification mode, **a verification means verifies newly recorded information that is intended to remain on a disc**. More specifically, Ohara specifically recites:

> "Thus, since the user decide whether to perform the verification or not, a problem is solved that the recording speed is reduced by always performing the verification.
> Step 4 (ST4): At this step, normal recording is performed by the recording means 35. When recording is completed, the operation is terminated without the verification being performed and the process waits for the next direction from the user.
> Step 5 (ST5): The information the user intends to record is recorded by the recording means 35 and the process proceeds to step 6.
> Step 6 (ST6): The verifying means 34 verifies the information recorded at step 5.
> Specifically, (1) the area recorded just now is reproduced, and (2) simultaneously therewith, the error correcting circuit is actuated to check the number of errors." (See Ohara, col. 11, lines 7-22).

As evident from at least the portion of the disclosure of Ohara depicted above, Ohara specifically teaches away from the invention of the Applicant. More specifically, in Ohara actual data intended to remain on a disc is written onto a recording medium and then the recorded actual data is reproduced and tested for errors. This is in direct contrast to the teachings and claims of the Applicant, wherein old data or test data in an accessed portion of a medium is reproduced and examined for defects, prior to recording actual data of interest onto the accessed portion of the medium. That is, there is absolutely no teaching, suggestion or disclosure in Ohara for at least "selectively examining data in said accessed portion for defects **prior to recording said new data**" "wherein if defects are detected in the data in said accessed portion, corrective measures are taken **such that the new data to be recorded is not recorded in said accessed portion having defects**" as taught in the Applicant's Specification and claimed by

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at least the Applicant's claim 1 and claim 12. Instead, in Ohara, upon a history determining means detecting the absence of an identification member of the recorded data intended to remain on the disk, a user is offered an option whether or not to perform a verification mode. If a user opts to perform the verification mode, a verification means verifies newly recorded information that is intended to remain on a disc (i.e., not test data or previously recorded data examined before recording the new data that is intended to remain on a recordable storage medium as in the invention of the Applicant). That is, the Applicant's invention, at least with respect to claims 1 and 12, is directed at least in part to addressing the deficiencies of the prior art such as the invention of Ohara wherein data intended to remain on a disc have to be unnecessarily rerecorded because of defects in a recording or storage medium.

The Examiner alleges that the Applicant's claims 1 and 12 merely read on the verification step of Ohara, however the verification step of Ohara can only be performed after the data intended to remain on the disk has already been recorded prior to knowing whether any defects-exist on the portion of the disk that the data was written. The Applicant's invention is directed at least in part to preventing such recording before it is known whether defects exist or not and as such preventing the unnecessary rerecording of data intended to remain on a disk.

For at least the reasons described above, the Applicant respectfully submits that the teachings of Ohara fall far short of the Applicant's claimed invention, at least with respect to independent claims 1 and 12.

As such and at least because the teachings of Ohara teach away from the invention of the Applicant and because Ohara fails to teach, suggest or disclose at least "selectively examining data in said accessed portion for defects **prior to recording said new data**" "wherein if defects are detected in the data in said accessed portion, corrective measures are taken **such that the new data to be recorded is not recorded in said accessed portion having defects**" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1, the Applicant respectfully submits that the teachings and disclosure of Ohara do not teach each and every element of the Applicant's claimed invention, arranged as in

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the claim, and as such, Ohara does not anticipate the Applicant's invention, at least with respect to independent claim 1.

Therefore, the Applicant submits that for at least the reasons recited above independent claim 1 is not anticipated by the teachings of Ohara and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, independent claim 12 recites similar relevant features as recited in the Applicant's independent claim 1. As such, the Applicant submits that for at least the reasons recited above, independent claim 12 is also not anticipated by the teachings of Ohara and also fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Furthermore, dependent claims 3-10, 13-21 and 23-28 depend either directly or indirectly from independent claims 1 and 12 and recite additional features therefor. As such and for at least the reasons set forth herein, the Applicant submits that dependent claims 3-10, 13-21 and 23-28 are also not anticipated by the teachings of Ohara. Therefore the Applicant submits that dependent claims 3-10, 13-21 and 23-28 also fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102. Furthermore, the Applicant submits that all of these claims now fully satisfy the requirements of 35 U.S.C. §112. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

CUSTOMER NO.: 24498   **PATENT**
Serial No. 09/963,244   **PU010200**
Reply to Office Action dated: 7/25/05
Response dated: 10/19/05
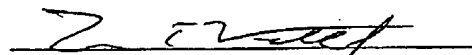
No fee is believed due. However, if a fee is due, please charge the
additional fee to Deposit Account No. 07-0832.

                                        Respectfully submitted,

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